

Remarks

Claims 1 through 13 and 16 through 21 are now pending.

Claim Amendments

Claim 1 has been amended to include the limitations of canceled claim 15. Claim 14 has been canceled as now being redundant. Applicants urge that the amendment to claim 1 puts the claims in condition for allowance. Further, Applicants note that the amendment includes does not require additional search and earnestly request entry of the amendment.

Rejections Under 35 U.S.C. Section 103

The claims stand rejected under 35 U.S.C. Section 103 variously as being unpatentable various over Kawabata in view of Boon (U.S. Patent No. 4,356,219; hereinafter "Boon"), Toyoda, and Watanabe (claims 1 through 4, 6 through 13, 17, 19, 21); over Kawabata in view of Boon, Toyoda, Watanabe, and Hayashi (claim 5); over Nguyen (U.S. Patent No. 6,338,374) in view of Boon, Toyoda, and Watanabe (claims 1 through 4, 6 through 13, 16, 18, 20); and over Nguyen, Boon, Toyoda, Watanabe, and Hayashi (claim 5). To the extent that the amended claims are deemed unpatentable over the cited art, these rejections are traversed.

Applicants note that each of the rejections include Boon as allegedly providing the teaching regarding the treatment of polyester yarns or cord, and will therefore address arguments to the deficiency of the teaching in Boon to overcome the rejections.

Claim 1 now recites that the polyester cords are formed in part by first obtaining a cord through twisting together a plurality of polyester yarns, wherein the polyester yarns comprise a polyepoxide adhesion activator prior to twisting into said cord; and secondly treating the cord with an aqueous emulsion comprising a dispersed particulate polyepoxide. Thus, the polyester cords include a polyepoxide applied to the polyester yarns before twist into cords, and a polyepoxide applied to the cords after twist of the yarns. By contrast, Boon teaches that an epoxy treatment may be applied before or after twist (Column 1, Lines 51 through 54), but does not teach applying epoxy treatments both to the yarn before twist and to the cord after

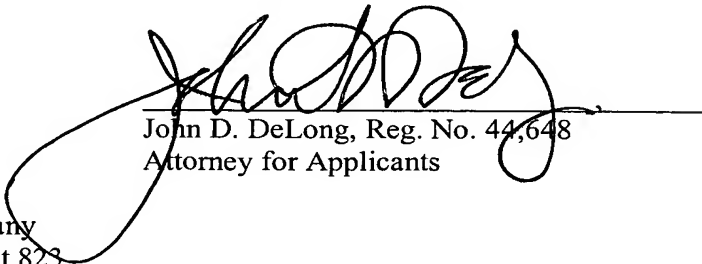
twist. Applicants urge that one skilled in the art would not understand from Boon that any advantage may be gained from applying the epoxy treatment of Boon both to the polyester yarns before twist and to the cord after twist; Boon instead only offers as alternatives the application of the epoxy treatment before twist or after twist, but does not teach nor make obvious application both before and after twist.

The present specification, however, includes evidence that application of a polyepoxide both before and after twist results in superior adhesion of rubber to the polyester cord than is the case for application of polyepoxide only before twist. In Tables 1 of Example 1, an adhesion comparison is shown between a reinforced rubber sample having polyester cord made with adhesive activated yarn (Page 12, Lines 33 through 34; ie, epoxide treated before twist) and then treated with polyepoxide after twist (Sample 1), and a control sample having polyester cord made with adhesive activated yarn, but no treatment after twist (Sample 2). Table 1 shows that the adhesion of the inventive Sample 1 is consistently superior to that of the control. Applicants urge that these data are surprising and unexpected in light of the teaching of the prior art Boon, wherein no benefit to epoxy treatment both before and after twist is taught nor made obvious.

Conclusion

Applicants urge that the amended claims are now fully patentable over the cited art. Applicants respectfully request allowance of all claims.

Respectfully submitted,



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